



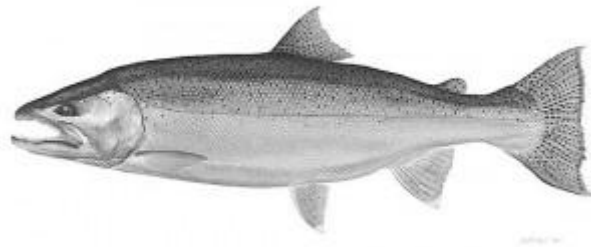
California Department of Fish & Game Santa Barbara Site Handbook



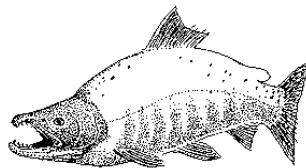


Watershed Stewards Project Mission

The mission of the AmeriCorps Watershed Stewards Project is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.



Steelhead Trout



Sockeye Salmon



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Introduction

Site Description

<i>Site Address</i>	California Department of Fish and Game, Santa Barbara 1933 Cliff Drive, Suite 9 Santa Barbara, Ca 93109
<i>Agency Affiliation</i>	Welcome to the Santa Barbara DFG, one of the most southern WSP sites. At the California Department of Fish and Game office in Santa Barbara, members will assist in monitoring endangered southern steelhead trout populations primarily through participating in spawning ground surveys. These surveys will primarily be coordinated by DFG staff. In addition to monitoring work the WSP members will assist the co mentoring site, the California Conservation Corps, with implementing and monitoring on the ground watershed restoration projects. Additional attendance at local meetings, community outreach and educational events may be desired.
<i>General Ecology</i>	<p>Santa Barbara is located on the "South Coast" the longest east-west trending section of coastline on the West Coast of the United States. The city lies between the steeply-rising Santa Ynez Mountains and the Pacific Ocean. Santa Barbara's climate is often described as Mediterranean, and the city is sometimes referred to as the "American Riviera." The average rainfall is around 15 inches. The weather is much like other coastal parts of southern California. Warm and sunny year round with brief periods of rain from November – April and often foggy mornings known as "June Gloom" in the early summer months.</p> <p>As of the census of 2010, the city had a population of 88,410, while the contiguous urban area, which includes the surrounding cities of Goleta, Carpinteria, and unincorporated areas of Isla Vista, Montecito, Summerland and others has an approximate current population of 220,000. The population of the entire county in 2010 was 423,895. In addition to being a popular tourist and resort destination, the city economy includes a large service sector, education, technology, health care, finance, agriculture, manufacturing, and local government. Education in particular is well-represented, with five institutions of higher learning on the south coast (the University of California, Santa Barbara, Santa Barbara City College, Westmont College, Antioch University, and the Brooks Institute of Photography). Behind the city, in and beyond the Santa Ynez Mountains, is the Los Padres National Forest, which contains several thousand acres of remote wilderness areas. The terrain is often represented by Chaparral and Coastal Sage Scrub habitat with areas of Oak Woodlands and Riparian forests along creeks and streams. The Santa Ynez Valley is a great wine growing region home to numerous local wineries. To the South into the Pacific are the Channel Islands. Many of the islands are owned by the National Park Service and are open to day-use visitors and over night campers. It's a great base camp for numerous outdoor activities. The nexus of the Mountain and the Ocean offers a great number of recreation activities (surfing, kayaking, hiking, backpacking, mountain biking, road cycling, sailing, fishing, scuba diving, etc...)</p>



Mentor Bios

Dana McCanne is an Environmental Scientist for the California Department of Fish and Game Steelhead Assessment Program in Santa Barbara. Working as a Senior Research Analyst, Biologist, and project Principle Investigator at the Forest Science Project, Institute for Watershed Management and the Institute for River Ecosystems at Humboldt State University, he has over a decade of experience designing and implementing region wide salmonid surveys. He is a member of the California Coastal Salmonid Monitoring Plan Technical Team tasked with developing the statewide salmonid monitoring program.

Chris Lima has been working on Steelhead Trout issues in southern California for over 4 years. Since December, he has been working on monitoring southern California Steelhead as an Environmental Scientist for the California Department of Fish and Game, and previously worked on Steelhead restoration projects as the Fish Habitat Specialist at the California Conservation Corps in Camarillo for over 3 years. Chris has also monitored California Condors for the United States Fish and Wildlife Service's California Condor Recovery Program and as a GIS Wetland and Riparian Habitat Technician for Cal State Northridge's Center for Geographic Studies. As a southern California native, Chris is interested in preserving and restoring the areas rich ecological value that is home to so many unique species and people.

Jill Taylor is a Fisheries Biologist/Fish Habitat Assistant at the California Conservation Corps, Camarillo Center. She grew up in southern California and moved east to Boston to attend the University of Massachusetts graduating with a B.S. in Biology with an emphasis in ecology. After graduating she returned to her hometown in Ojai and started her career in Fisheries working for a local water district doing steelhead monitoring on the Ventura River watershed. Jill now works to restore habitat in creeks in Santa Barbara, Ventura, and Los Angeles counties to benefit steelhead trout. As an avid hiker, she spends a majority of her time away from work exploring the creeks and peaks of the Los Padres National Forest.

George Johnson is the lead restoration specialist for the City of Santa Barbara's Creeks Division. George Johnson has eleven years of restoration experience with the City of Santa Barbara. George has implemented a number of successful creek restoration projects and programs. He has performed all aspects of project management including project design, public outreach, public presentations, permitting, CEQA review, grant writing, grant reporting, grant management, consultant selection and management, construction inspection, construction environmental monitoring, construction contractor management, post construction monitoring and post construction maintenance. George Johnson is experienced in restoration project management and has the skills to effectively bring a project from idea to construction as well as ensure proper long term maintenance and monitoring.

General Calendar of Duties at Santa Barbara

Month	Location (Field/Office/Classroom)	Site Duties	Work Load (Moderate, Busy, Light)	Typical Work Hours 10 hour days – 4 days/wk (M-Th 7:00-5:30) 8 hour days –
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				5 days/wk (M-F 8:00-4:30)
Fall				
October	Field and Office	Trainings, and education planning, juvenile monitoring, native planting and restoration activities	Moderate	8 hour days – 5 days/wk (M-F 8:00-4:30)
November	Field and Office	Field season preparation, adult and juvenile monitoring, Public outreach, data analysis, native planting and restoration activities, Patagonia Salmon Run	Moderate	8 hour days – 5 days/wk (M-F 8:00-4:30) + a Sunday for Salmon Run
Winter				
December	Field and Office	Adult monitoring, public outreach, data analysis, native planting and restoration activities	Moderate/ Heavy	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
January	Mostly Field, some Office	Adult monitoring, public outreach, data analysis	Heavy	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
February	Mostly Field, some Office	Adult monitoring, public outreach, data analysis	Heavy	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
Spring				
March	Mostly Field, some Office	Adult monitoring, public outreach, data analysis	Moderate/ Heavy	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
April	Field and Office	Adult monitoring, juvenile monitoring, public outreach, data analysis, NPS Science Festival, Earth Day events!	Moderate/ Heavy	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
May	Field and Office	Adult monitoring, juvenile	Moderate/	8 hour days –



		monitoring, public outreach, data analysis. Great time to have ISP event and/or class room education.	Heavy	5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
Summer				
June	Field and Office	Juvenile monitoring, public outreach, data analysis, project assessment	Moderate	8 hour days – 5 days/wk (M-F 8:00-4:30) Field work weather dependent and will require flexibility, possibly working nights and weekends.
July	Some Field, Mostly Office	Juvenile monitoring, data analysis, project report preparation	Moderate	8 hour days – 5 days/wk (M-F 8:00-4:30)
August	Office	Report preparation	Light	8 hour days – 5 days/wk (M-F 8:00-4:30)



Description of Site Duties

Fish Passage Restoration

In the Fall, the CCC and City of Santa Barbara will have multiple habitat restoration projects taking place. Members may be asked to help with different parts of project implementation including photo monitoring, native vegetation planting, willow staking, seeding and installation of erosion control measures. During the Winter and Spring members will be asked to help with ongoing maintenance and monitoring activities associated with the projects, including watering of plants, weeding of non natives, photo monitoring and project effectiveness monitoring.

Spawner, Snorkel, Presence/Absence, and other types of Surveys

Spawner surveys typically take places anywhere from December to April. They involve the hiking of rivers and creeks looking for live and dead adult steelhead as well as the nest that they make when they spawn, known as a redd. These surveys are fun and exciting, often taking you to places that you would otherwise never have the opportunity to hike to.

Out reach and Educational Events

Occasionally throughout the year members will be asked to participate in local educational events through tabling with educational information. These may include the Patagonia Salmon Run, the Santa Barbara Earth Day festival, City of Santa Barbara's Creek Week, The Ventura Earth Day and the Ojai Earth Day Festival, and the Salmonid Restoration Federation Conference.



ISPs and Outreach Events

ISP Information

Each member is required to complete an Individual Service Project (ISP). ISPs involve recruiting at least 13 volunteers from the community to participate in a community outreach or restoration event. There are multiple ISP options depending on what the individual member's interest are. Potential Ideas:

Volunteer Habitat Restoration Events

-City of SB: Native Planting Days

-Non Native vegetation removal at the Carpinteria Creek Mouth

Planning a Volunteer Clean Up Day

-Carpinteria Creek

-Mission Creek

Planning a Community Outreach Event

-Santa Barbara Steelhead Festival

In Year 18, the members completed a nonnative vegetation removal and planted natives along Carpinteria Creek under the Eighth Street Pedestrian Bridge. They organized the event with the help of the City of Carpinteria, who provided the plants, water, snacks, some tools, gloves, and a port-a-potty for the event. They recruited ___ volunteers over two consecutive Saturdays to plant natives on the Calle Ocho side of the bridge. Local community members donated freshly baked cookies on both days and on the second day a local community member donated pizza from a local pizzeria. The members installed drip irrigation at the site following the event and completed another planting day with a local Boy Scouts Troop to remove nonnative vegetation and plant natives on the opposite side of the bridge.

Summary Information:	
1. Member name(s) Include all co-coordinators	Allison Krist and Andrea Blue
2. Date submitted	12/2/11
3. Project type <i>(e.g., bank stabilization, stream clean-up, etc.)</i>	Non-native vegetation removal and native planting
4. Project title Include location and/or stream	Carpinteria Creek Eighth Street Bridge Planting
5. Project date	01/28/12 and 02/04/12
6. Project timeframe	9am-1pm
7. Project location <i>Include directions or a physical address</i>	5479 8th Street Carpinteria, CA 93103 <u>Directions from the 101 South:</u> Exit Linden Ave. Turn right onto Linden Ave. Turn left onto Carpinteria Avenue. Turn right onto Palm Ave. Turn left onto 8th Street. The site and parking are located at the end of the street. <u>Directions from the 101 North:</u> Exit Casitas Pass Road. Turn left



	<p>onto Casitas Pass Road. Turn right onto Carpinteria Avenue. Turn left onto Palm Avenue. Turn left onto 8th Street. The site and parking are located at the end of the street.</p> <p><u>Directions from the Carpinteria Avenue Southbound:</u> Take Carpinteria Avenue south. Turn right onto Palm Avenue. Turn left onto 8th Street. The site and parking are located at the end of the street.</p> <p><u>Directions from the Carpinteria Avenue Northbound:</u> Take Carpinteria Avenue north. Turn left onto Palm Avenue. Turn left onto 8th Street. The site and parking are located at the end of the street.</p> <p><i>Maps attached</i></p>
8. Project location/landowner(s)	Site is located on either side of the Eighth Street Bridge. The City of Carpinteria owns the property.
9. Project partners <i>Also include what each partner will be providing for the project or its development</i>	The City of Carpinteria owns the property, will provide the plants, shovels for planting, access to a port-a-potty (possibly through an outside source), and water and snacks for the volunteers.
10. Mentor approval obtained	x Yes <input type="checkbox"/> No

Watershed Information:

11. Stream name	Carpinteria Creek
12. Watershed name	South Coast (Carpinteria Creek)
13. Salmonids present <i>Indicate species of salmonid present and historical</i>	Steelhead (<i>Oncorhynchus mykiss</i>)

Project Objectives:

14. Project need Clearly describe how the project will improve salmonid habitat and how the need for the project was identified	<p>The original Eighth Street Pedestrian Bridge was replaced in order to accommodate the increase in pedestrian traffic observed in the area. When the bridge was replaced, several of the surrounding trees were removed during construction. These trees provided shade and reduced runoff and erosion into the stream. The area was also cleared of vegetation during the course of the project and, according to the plans, should be planted with native cover. After the project, several replacement trees and native cover plants were planted to reduce erosion and stabilize the banks underneath the bridge. This site was not irrigated and, as a result, many of the replacement trees and plants did not survive. In addition, many non-native plants have moved into the area, which also may have contributed to the deaths observed in the native plants and trees. These non-natives contribute to erosion into the stream, because during the beginning of the wet season the smilo grass has reduced cover and is able to hold down less soil than plants with more root and/or surface area. As a result of this project, the trees will be replaced providing more shade to the stream to prevent water temperature increases and reduce erosion into the stream. In addition, the native plants will provide more cover for the slopes resulting in less erosion and, with the addition of prickly or unattractive plants, prevent</p>
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	pedestrians from trampling the plants and trees.	
15. Limiting factors to salmonids remediated by proposed project	<input type="checkbox"/> Water quantity (lack of flow, diversion, runoff) <input checked="" type="checkbox"/> Water quality (temperature, chemistry, turbidity) <input checked="" type="checkbox"/> Riparian dysfunction (lack of shade, excessive nutrients, roughness elements) <input type="checkbox"/> Excessive sediment yield (pool and gravel quality) <input type="checkbox"/> Spawning requirements (gravel, resting areas-pools) <input type="checkbox"/> Rearing requirements (velocity, lack of shelter, pools) <input type="checkbox"/> Estuary/ lagoon issues (closure during migration periods) <input type="checkbox"/> Fish passage (emigration and immigration)	
16. Potential project volunteers	<input type="checkbox"/> All <input checked="" type="checkbox"/> Adults and youth <input type="checkbox"/> Adults Only <input type="checkbox"/> Persons with disabilities Comments:	
17. Volunteer recruitment venues <i>(Please give contact info of intended media source)</i>	South Coast Habitat Restoration, Carpinteria Creek Watershed Coalition, and City of Carpinteria's email lists. Coastal View advertisement. This will be approved by the City of Carpinteria and passed on through their pre-arranged channels to the Coastal View office.	

Media Outreach:

18. Intended media outreach <i>A minimum of one of the following is required: PSA, Press Release, Post Press Release or Media Advisory is required</i> <i>Flyers are not required but are recommended as a supplemental publicity tool.</i>	Explanation of Media: PSA: Inviting the public to attend the event. Played on the radio. Media advisory: Informs the media that the event is taking place and invites them to attend. Press release: Tells the story of the event. Distributed through the print media.	<u>Pre-Project:</u> <input type="checkbox"/> PSA <input checked="" type="checkbox"/> Media Advisory <input type="checkbox"/> Press Release <input type="checkbox"/> Interviews <input checked="" type="checkbox"/> Flyers	<u>Post-Project:</u> *deadline for post-event media is 48 hours after completion of the ISP <input type="checkbox"/> Press Release <input type="checkbox"/> Interviews
19. Building a publicity campaign <i>Please outline name and location of media venue you plan to target for your publicity campaign.</i>	<u>Radio or TV stations:</u> Example: KHSU, KIEM TV	<u>Print media:</u> Example: Times-Standard, North Coast Journal Coastal View	<u>Bulletin board spaces for flyer posting:</u> Example: HSU bulletin boards, Safeway employee lounge



Project Tasks and Results:

<p>20. Site Preparation</p> <p><i>Describe any work that will be done to prepare the site prior to the volunteer project.</i></p>	<p>Flagging to prevent trespass on private property and for native planting plan. Flagging of safe paths down the slope.</p>
<p>21. Measures to Mitigate Potential Negative Impacts from Volunteer Traffic</p> <p><i>Identify the measures you will take to limit the impact of volunteer traffic from your project on the watershed (ex: erosion into stream, trampling native species, other disturbances).</i></p>	<p>Safe paths down the slopes will be flagged for volunteers to prevent slips, soil erosion, and trampling of native vegetation. These paths will be located in areas that are already cleared of vegetation and will be planted last to prevent damage to the new plants.</p>
<p>22. Detailed project tasks</p> <p><i>Include specifically what you will have volunteers do. Describe the choice of activities, equipment used, and any refreshments that will be provided.</i></p>	<p>The area is approximately 100 feet by 50 feet, split between two sides of the bridges around the abutments. Depending on the weather we may coordinate the planting differently. For warmer weather, we will have volunteers plant on the west side of the bridge in the morning and then later in the day on the east side of the bridge to provide cooler environs for the volunteers. For cooler weather, we will have volunteers plant on one side of the bridge until it is completed.</p> <p>In the planting areas, a flag will be placed with a plant located next to it. The plants will be placed with respect to the restoration plan that accompanies the engineer's design of the bridge and the project biologist's expertise. Once the area is setup, volunteers will remove non-native vegetation using their hands, hand cultivators, and/or small trowels surrounding the flag and plant. After the area has been cleared, a volunteer will dig the appropriately-sized hole for the plant. Once the hole is complete, the volunteer will remove the plant from its pot by pressing on the sides of the pot to loosen it. The plant will then be placed in the hole and filled/covered with dirt that will then be compacted to prevent oxygen from killing the plant's roots. Once the plants have been successfully planted, they will be watered (either using individual buckets or a hose).</p>
<p>23. Expected deliverables</p> <p><i>Include specific quantitative results you expect to accomplish (e.g., plant 500 trees, clean up 1 mile of stream, remove 200 sq. ft of invasive species, etc). Also include a description of how this will improve salmonid habitat.</i></p>	<p>150 plants in approximately 4,500 square feet including Western Sycamores (<i>Platanus racemosa</i>), California roses (<i>Rosa californica</i>), bush monkeyflower (<i>Mimulus aurantiacus</i>), mugwort (<i>Artemisia douglasiana</i>), California brome (<i>Bromus carinatus</i>), Giant Rye (<i>Leymus condensatus</i>) Volunteers will be removing mostly smilo grass (<i>Piptatherum miliaceum</i>). Plants will be placed in four foot centers according to the biologist's recommendation, unless the plants are smaller than 1 gallon. If the plants are smaller than 1 gallon (depends of the nursery), then more plants will be planted closer together in smaller holes that will require less effort. This area was disturbed in order to replace a barrier to steelhead migration with a pedestrian bridge. During the course of</p>



	<p>the project, several trees were removed and after the project several invasive species moved into the area. Trees provide shade for the stream, which prevents the temperature of the water from rising. In addition trees also reduce runoff and erosion in an area by reducing the amount of water that hits the ground and holding more soil down on a slope through direct root contact and the creation of a leaf litter layer. Some of the previously planted trees did not survive the summer and the non-natives plants may have contributed to the mortality of the other natives that were planted in the area. In addition, the non-natives shade out tree seedlings and contribute to erosion, because during the beginning of the wet season the smilo grass has reduced cover and is able to hold down less soil than plants with more root and/or surface area.</p>
<p>24. Safety training / issues <i>Include potential safety hazards and what training / equipment you will provide to volunteers prior to beginning work as a preventative safety measure</i></p>	<p>Heat related illnesses: Water will be provided for volunteers. In addition, the Eighth Street side of the bridge receives more sun in the afternoon. In order to prevent heat related illnesses we will ask volunteers to work on the Eighth Street side of the bridge in the morning and the Calle Ocho side in the afternoon. Gloves will be provided. We did not see any poison oak at the site, but will warn volunteers of any poison oak nearby and bring a color photo so that volunteers will be able to identify it for themselves. In addition, a planting demonstration will be given at orientation for volunteers to teach volunteers about (1) proper tool safety, (2) the proper way to remove vegetation without damaging any natives, (3) the proper way to plant, and (4) any other procedures for safety.</p>

<u>Additional Project Information:</u>	
25. WSP assistance needed	
26. Comments/info/photos	



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Weed Warriors Wanted

Saturday January 28, 2012 and February 4, 2012

From 9am-1pm

Meet at the Eighth Street Pedestrian Bridge

Rain or Shine



Join the Carpinteria community in an effort to remove invasive weeds and replace them with beautiful native plants.

Who: Watershed Stewards Project, California Conservation Corps, the City of Carpinteria, and YOU!

What: Pulling non-native weeds and planting native plants

Where: Underneath the Eighth Street Pedestrian Bridge between Eighth Street and Calle Ocho in Carpinteria

Why: To improve habitat for Steelhead and beautify Carpinteria Creek

Please wear closed-toe shoes, pants, and sun protection. Bring gloves if you have them.

Parking is limited, please carpool!

Questions? Contact Andrea Blue at Andrea.Blue@ccc.ca.gov or Allison Krist at Allison.Krist@ccc.ca.gov or Erin Maker at (805) 684-5405 x 415

The Watershed Stewards Project's (WSP) mission is to conserve, restore, and enhance anadromous watersheds for future generations by linking education with high quality scientific practices.

A special project of the California Conservation Corps, WSP is administered by California Volunteers and sponsored by the Corporation for National and Community Service.



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Outreach Information

There are multiple local meetings that will provide a forum to promote your event including the Tri-county fish team, the Santa Barbara and Ventura SCWRP task force meetings, the Carpinteria Creek Watershed Coalition, and many others.

Santa Barbara has multiple opportunities for connecting with local volunteers.

Potential partners: City of Carpinteria, City of Santa Barbara, County Ag Commissioner's Office, Cachuma RCD, Santa Barbara ChannelKeeper, Audubon, Channel Islands Restoration, and many more.

Calendar of Outreach Events for Site / Community (Optional)

*Patagonia
Salmon Run
November*

Usually takes place the first Sunday in November on the Ventura River, is a small 5K that brings together local environmental groups as well as community members for a family friendly event that tries to promote environmental awareness. Each year the profits from the run benefit a local environmental group. CCC usually tables with information about the southern steelhead, local watershed issues as well as info on the work that they do.

*Earth Day
April*

There are a variety of local Earth Day events. Downtown Santa Barbara hosts a large 2 day festival. Ventura and Ojai also host single day events.



Education

Education Notes

There are multiple opportunities to partner up with local schools to fulfill your education requirements. There are also local watershed education programs that members can partner with to reach out to for contacts and resources.

The Cate School - Carpinteria

- Science Teacher - *Joshua Caditz*, (805) 684-8409 x136

Carpinteria Middle School

- *Susan Anderson*, (805) 684-4107 x 262

Once upon A Watershed Program – various schools in Ojai

- *David White*, (805) 390-0747

In Year 18, members completed the Real Science curriculum in three classrooms and three lessons in one classroom.

- Cecilia Long, Aliso Elementary School, Title I School
clong@cusd.net 805-684-4539

The members educated 27 fourth grade students for six lessons. The students were interested and excited about learning. A few students missed several lessons, because they were pulled out of class by teachers for multiple reasons (speech, ESL). The students really enjoyed quizmo and it helped highlight important information from the lesson.

- Alexa Mannion, Aliso Elementary School, Title I School
alexaginder@yahoo.com 805-684-4539

The members educated 29 fourth grade students for three lessons. This class was less interested in the topics and more difficult to move through different activities. One of the lessons, we only made it through two activities, because the students had so many questions and off topic comments. The teacher assisted with gaining control of the class, but the students seemed to be less inclined to listen. This class was late on Friday afternoon, which could have contributed to their lack of focus.

- Summer Bray, Summerland Elementary School
sbray@cusd.net 805-969-1011

The members educated 24 fourth and fifth grade students for six lessons. These students had many questions about every topic, but were well able to understand the material. They did not seem as excited about the material as the other Summerland class; however they participated in every activity and completed all of the work. The teacher had excellent control of the classroom and provided any assistance as necessary.

- Sarah Anderson, Summerland Elementary School
grenigrl@hotmail.com 805-969-1011

The members educated 18 second and third grade students in six lessons. These students were very excited to learn about every topic and seemed to have many questions as well. The biggest problem was keeping them on task and in their seats. These students were more likely to skip ahead during activities and do them improperly.



Site / Region Specific Education Resources

Watershed Resource Center – Santa Barbara

- *Lindsay Johnson (805) 884-0459 x16 education@artfromscrap.org*

City of Carpinteria, Environmental coordinator

- *Erin Maker, 805-684-5405*

SB Project Clean Water

- *Fray Crease, 805-568-3546*



Local Ecology

Descriptions of Local Ecology

Santa Barbara is located on the "South Coast" the longest east-west trending section of coastline on the West Coast of the United States. The city lies between the steeply-rising Santa Ynez Mountains and the Pacific Ocean. Santa Barbara's climate is often described as Mediterranean, and the city is sometimes referred to as the "American Riviera." The average rainfall is around 15 inches. The weather is much like other coastal parts of southern California. Warm and sunny year round with brief periods of rain from November – April and often foggy mornings known as "June Gloom" in the early summer months. Behind the city, in and beyond the Santa Ynez Mountains, is the Los Padres National Forest, which contains several thousand acres of remote wilderness areas. The terrain is often represented by Chaparral and Coastal Sage Scrub habitat with areas of Oak Woodlands and Riparian forests along creeks and streams. The Santa Ynez Valley is a great wine growing region home to numerous local wineries. Along the foothills to the mountains cattle ranching, citrus orchards and avocado orchards dominate the landscape.



Housing and Local Resources

Housing Contact List

Housing may be more expensive in Santa Barbara than some of the more remote WSP sites. To rent a bedroom in a house can run anywhere from \$600 to \$800. Because of the large number of local colleges there is rapid turnover in the rental market and members should have no problem finding housing. Shared rooms are somewhat common and can greatly reduce the cost of rent.

Craigslist One of the best resources for available housing. <http://santabarbara.craigslist.org/>

Property Managers Wolfe and Associates <http://www.rlwa.com/>
Meridian Group: <http://www.meridiangrouprem.com/>
Real Property Management: <http://www.santabarbarapropertymanagement.com/>
Cochrane Property Management: <http://www.cochranepm.com/>
Seascape Realty: <http://www.carpinteriarealestateinc.com/>

Other:
University listings
Local paper
Talk to your mentors and co-mentors

Local Resource Contacts

Santa Barbara County Social Service
http://www.countyofsb.org/social_services/default_rt.aspx?id=15068&id2=15480

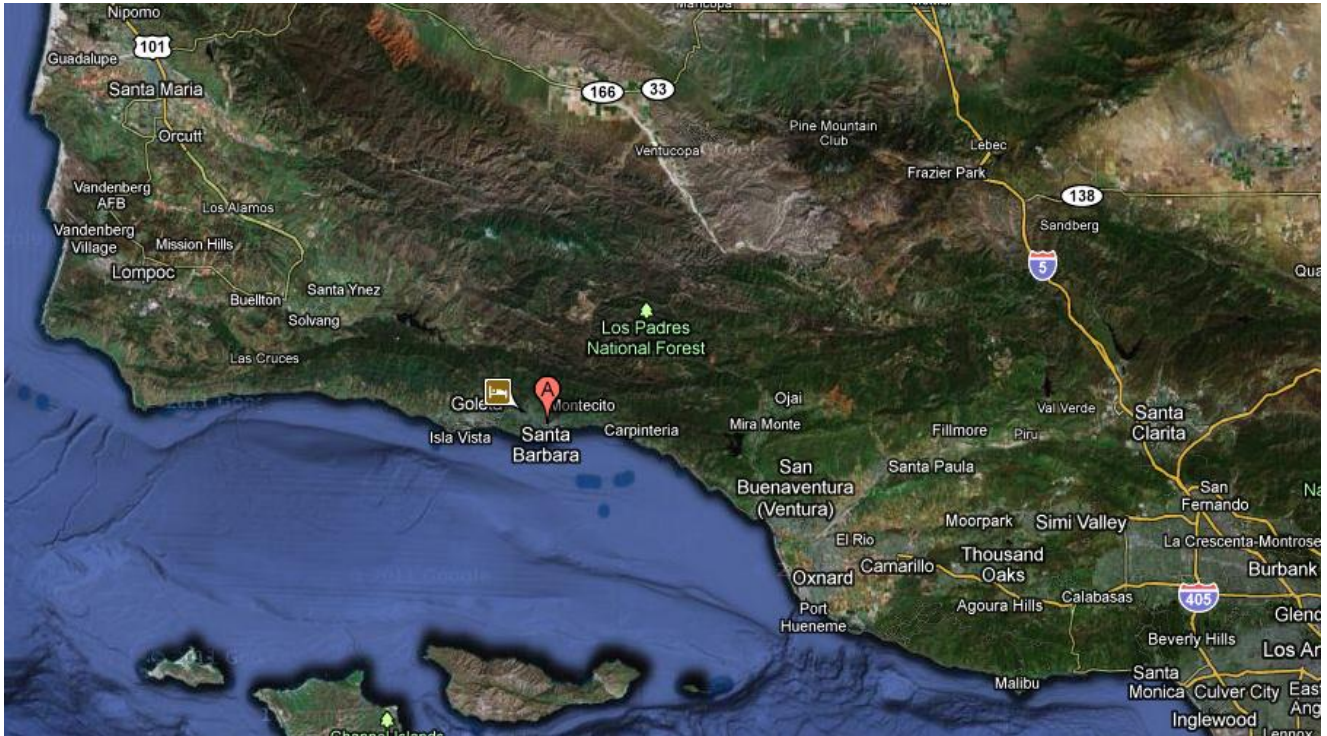
Santa Barbara Library
<http://www.sbplibrary.org/>

Santa Barbara Farmers Markets
<http://www.sbfarmersmarket.org/>



Community Information

Map of Area



Community Demographics

Santa Barbara:

The census of 2010 recorded 88,410 people in the city proper, a loss of 1,190 from the previous census, making it the second largest city in the county after Santa Maria. The racial makeup of the city was 74.0% White, 1.8% African American, 1.1% Native American, 2.8% Asian, 0.1% Pacific Islander, 16.4% from other races, and 3.9% from two or more races. People of Hispanic or Latino background, of any race, were 35.0% of the population. There were 35,605 households out of which 24.3% had children under the age of 18 living with them, 39.8% were married couples living together, 9.5% had a female householder with no husband present, and 46.8% were non-families. 32.9% of all households were made up of individuals and 11.4% had someone living alone who was 65 years of age or older. The average household size was 2.47 and the average family size was 3.17.

In the city, the population was spread out, with 19.8% under the age of 18, 13.8% from 18 to 24, 32.3% from 25 to 44, 20.4% from 45 to 64, and 13.8% who were 65 years of age or older. The median age was 35 years. For every 100 females there were 97.0 males. For every 100 females age 18 and over, there were 95.0 males. The median income for a household in the city was \$47,498, and the median income for a family was \$57,880. Males had a median income of \$37,116 versus \$31,911 for females. The per capita income for the city was \$26,466. About 7.7% of families and 13.4% of the population were below the poverty line, including 16.8% of those under age 18 and 7.4% of those age 65 or over. If one compares the per capita income to the actual cost of living, the number of people living below the poverty line is considerably higher.

Carpinteria:

As of the census of 2000, there were 14,194 persons, 4,989 households, and 3,332 families residing in the city. The population density was 5,250.8 people per square mile. The racial makeup of the city was 73.40% White, 0.59% African American, 0.99% Native American, 2.38% Asian,



0.18% Pacific Islander, 18.09% from other races, and 4.37% from two or more races. Hispanic or Latino of any race were 43.50% of the population. There were 4,989 households out of which 33.3% had children under the age of 18 living with them, 51.6% were married couples living together, 10.5% had a female householder with no husband present, and 33.2% were non-families. 25.5% of all households were made up of individuals and 10.5% had someone living alone who was 65 years of age or older. The average household size was 2.82 and the average family size was 3.38.

In the city the population was spread out with 25.6% under the age of 18, 9.2% from 18 to 24, 30.7% from 25 to 44, 22.1% from 45 to 64, and 12.4% who were 65 years of age or older. The median age was 36 years. For every 100 females there were 100.8 males. For every 100 females age 18 and over, there were 97.8 males. The median income for a household in the city was \$47,729, and the median income for a family was \$54,849. Males had a median income of \$35,679 versus \$30,736 for females. The per capita income for the city was \$21,563. About 7.1% of families and 10.4% of the population were below the poverty line, including 12.5% of those under age 18 and 7.7% of those ages 65 or over.

Community Service

The Red Cross - <http://www.sbredcross.org/>

DAWG – <http://www.sbdawg.org/>

YMCA - http://www.ciyymca.org/santa_barbara/index.html

Life Chronicles – <http://lifechronicles.org/>

Santa Barbara Food Bank - <http://www.foodbanksbc.org/>

Habitat For Humanity - <http://www.sbhabitat.org/>

Santa Barbara Public Library - <http://sbplibrary.org/hourslocations/index.html>

Dos Pueblos Community Service List - http://www.dphs.org/?page_id=562

The Santa Barbara Food Bank, Habitat for Humanity Restore, and Santa Barbara Public Library require a short training or orientation prior to volunteering. If you are organizing hours for a national service day, it is best to complete the training(s) at the beginning of the term. In addition, many of the volunteer hours fall during regular business hours. It is best to organize your volunteering well in advance, so you can work with the organization and notify your mentors if you need to complete your service during the week.



Entertainment and Community Events

Resources for Affordable Entertainment Options

Soho – small reasonable concert venue

Santa Barbara City leagues, volleyball, basketball, softball, soccer, kickball & more

The great outdoors!

West Wind Drive in, Goleta drive in movie \$6 always a double feature.

First Thursdays – one galleries on the first Thursday of each month with food and wine tastings.

Sunken Gardens Free Movies in the Park.

Recurring Event List

Santa Barbara Farmers Markets (awesome year round farmers market) – Downtown SB Tuesday and Saturday, Thursday in Carpinteria, Friday in Montecito, and Sunday in Goleta.

Carpinteria Avocado Festival

Chalk Art Festival – Memorial Day weekend at the Santa Barbara Mission

Summer Solstice Festival – each June big week long festival and parade

Night Moves- Ever Wednesday from May-September 5K run and 1K swim race from Ledbetter beach. \$20 race entrance fee includes dinner and unlimited beer.

Zoo Brew – brewery tasting at the Santa Barbara Zoo usually June.

Helpful Hints

Santa Barbara is a great city with lots to do and see. Make the most of your time off.
Sign up for food stamps early the process takes some time.
Be prepared for field work. Proper gear and layers makes a difference.
Ask your mentors if you need anything.



Attachments

Contact Lists

Supervisor

Mary Larson
DFG – Senior Fisheries Biologist Supervisor
562-342-7186

Mentor

Dana McCanne
DFG – Associate Biologist
805-892-2352

Chris Lima
DFG– Environmental Scientist
805-568-1323

Co-Mentor

Jill Taylor
CCC – Fish Habitat Specialist
805-288-3519

Co-Mentor

George Johnson
City of Santa Barbara- Creeks Supervisor / Restoration Specialist
805-897-1958



Ed Logs & Information

Section 1: Basic Education Info. Required	Member Name
	Dates of <i>Real Science</i> Visits <i>mm/dd/yyyy to mm/dd/yyyy</i>
	School Name
	Teacher Name
	Grade Level
Section 2: Narrative Required	<p><u>Was teaching this class a positive experience?</u> If not, please include a note about the issues. (i.e the school uses WSP for consecutive years and the stu</p>
	<p>Teaching Real Science in Ms. Bray's class was great. These students seemed interested in the underlying plan. The students had tons of questions related to the topic and that sometimes ate up 10-15 minutes of</p>
	<p>Please include the lessons that you taught plus any information that will be helpful to next year's n</p>
	<p>Week 1: Watersheds and Land use – Handout and Enviroscope: The students filled out the worksh streams. We did not use the word non-point source or point source, because the students from Ali understood all of the parts of a watershed. The students were very interested in fires, because they weathering and erosion for this lesson.</p>
	<p>Week 2: The Water Cycle – Water cycle handout and Incredible Journey Game (pg 128): Each stude worksheet. After the students filled out the worksheet we gave them pieces of the water cycle and moved to the next station according to their roll of the dice. After the students picked up beads fro students stickers for correct answers. The students understood precipitation, evaporation, and tra</p>

	<p>Week 3: Salmonid Life Cycle – Life cycle worksheet followed by the Life Cycle Pageant, and Life Cycle game. We had each student stand up and perform each body movement inside the classroom before we moved to the next species.</p>
	<p>Week 4: Salmonid Anatomy and Physiology – Worksheet (pg 290), Felt board, and Fish Prints: The students filled in their own worksheet. The students went outside after this activity to create a fish print. After the prints were made, they were displayed in the hallway.</p>
	<p>Week 5: Salmonid Habitat – Habitat worksheet (pgs 202 and 217) , Habitat Chat (pg 212), and Finish Line. The students explained what the item was and how it related to a fish's habitat. The students then received their driver's license. They were as creative as they wanted.</p>
	<p>Week 6: Stream Health – Macroinvertebrates: Worksheet: We reviewed the definition of a macroinvertebrate from this and previous lessons before administering the post-test.</p>
	<p>Please complete this form print & sign.</p>

Section 1: Basic Education Info. Required	Member Name
	Dates of <i>Real Science</i> Visits <i>mm/dd/yyyy to mm/dd/yyyy</i>
	School Name
	Teacher Name



	Grade Level
Section 2: Narrative Required	<p><u>Was teaching this class a positive experience?</u> If not, please include a note about the issues. (i.e the school uses WSP for consecutive years and the stu</p>
	<p>Teaching Real Science in Ms. Anderson's class was great. The students were a bit unfocused, but it beca in his seat, not distracting other students, and completing tasks. However Ms. Anderson was helpful with n</p>
	<p>Please include the lessons that you taught plus any information that will be helpful to next year's n</p>
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<p>Week 4: Salmonid Anatomy and Physiology – Worksheet (pg 290), Life Cycle Ring (pg 161), and Fis purpose of each body part. Some of the students went outside after this activity to create a fish pri were not paying attention or skipped ahead. In the end, all of the students finished their ring and w</p>	



	Week 5: Salmonid Habitat – Habitat worksheet (pgs 202 and 217), Habitat Chat (pg 212), and Finish explain what the item was and how it related to a fish’s habitat. The students then received their dr
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	Please complete this form print o

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Outreach Summaries & Information

Site Protocols & Information

Site Forms